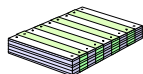
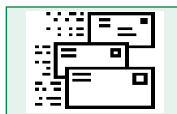


APPLICATION PROCESS



A complete Application includes the following:

1. A completed **Application Form**
2. A current **Transcript** that includes grades in the courses required for eligibility
3. A 300-word, typed or legibly written, **Essay** describing:
 - ✓ Personal expectations from the Program
 - ✓ Career and research interests
 - ✓ How participation in the Program will add to your personal and professional development
4. Two completed **Recommendation Forms**, at least one of which must be from a current mathematics or science teacher



Each year, applications for the approximately 300 apprenticeships expected to be available are due at the QEM Network by the first Monday in February, and applicants will be notified by the first Friday in April. The 8-week Program operates from about mid-June to mid-August each year. Information and applications for each year's Program may be obtained by contacting:

QEM Network
NASA SHARP PLUS Program
1818 N Street, NW • Suite 350
Washington, DC 20036

Tel: (202) 659-1818 • Fax: (202) 659-5408

E-mail: sharpplus@qem.org

URL: <http://qemnetwork.qem.org/sharpplus.html>

SELECTION

All applications are screened for eligibility, and all eligible applicants' qualifications will be reviewed to identify the pool of finalists. Each finalist then participates in an interview conducted by QEM staff or professionals who are QEM affiliates. The finalists whose qualifications, backgrounds, and interview results best match the overall goals of the NASA SHARP PLUS Program are offered apprenticeships, subject to available slots.

ABOUT THE SITES

SHARP PLUS sites are colleges or universities with a demonstrated commitment to high-quality mathematics, science, or engineering (MSE) education for *all* students. Several institutions have served as host sites for SHARP PLUS at different times over the years. These include:

Alabama A&M University (AL)
California State University at Los Angeles (CA)
Central State University (OH)
Cornell University (NY)
Florida A&M University (FL)
Florida International University (FL)
Georgia Institute of Technology (GA)
Hampton University (VA)
Morgan State University (MD)
Norfolk State University (VA)
North Carolina A&T State University (NC)
Northern Arizona University (AZ)
Old Dominion University (VA)
Prairie View A&M University (TX)
San Francisco State University (CA)
Southern College of Technology (GA)
Southern University at Baton Rouge (LA)
Texas A&M University (TX)
Texas Southern University (TX)
University of Cincinnati (OH)
University of New Mexico (NM)
University of Pennsylvania (PA)
University of Wisconsin-Madison (WI)

To maximize the benefits accruing from the 8-week residential program, several factors will be taken into account when deciding where selected students will be placed. These include grade level and place of residence. Apprentices will not be assigned to university sites that are within commuting distance (50 miles or less) of their homes.



Educational Program	
Teachers/ Students	Grades 10–12

NASA SHARP PLUS

A Program of the Education Division
of the
National Aeronautics and Space
Administration (NASA)

- Eight-week apprenticeship
- Hands-on research experiences
- Mentors and role models
- Summer, residential, college experience
- Visit to a NASA Field Center
- Exposure to mathematics-, science-, and engineering-related careers
- Course, college, and career information
- Enrichment activities
- Stipend

Conducted by the
Quality Education for Minorities (QEM)
Network

Office of Human Resources
and Education
Education Division
EP-1997-11-318-HQ



OVERALL GOAL

To increase the participation and success rates of students who are underrepresented in challenging precollege mathematics and science courses, thereby increasing the pool of such students as mathematics, science, and engineering majors in college and, hence, their representation among prospective science and engineering professionals available for the workplace.

ABOUT THE PROGRAM

The NASA Summer High School Apprenticeship Research Program (SHARP) PLUS is a research-based mentorship program that was initiated in 1993. It is conducted by the QEM Network for NASA and is the **residential analogue** of the NASA SHARP Program, a **commuting** program that takes place at NASA Field Centers. In contrast to SHARP, the SHARP PLUS research experiences occur in industry and in laboratories at universities that host SHARP PLUS apprentices on their campuses.

NASA SHARP PLUS apprentices participate in an intensive 8-week research program that is hosted by institutions located across the United States. Students live on the institutions' campuses (20 at each site) and work with researchers/mentors at nearby industrial sites or in laboratories at the institutions in which cutting-edge research is being conducted.

In NASA SHARP PLUS, individual working relationships are established between students and active researchers in mathematics, science, engineering (MSE), or related fields. This program offers researchers and other science and engineering professionals the opportunity to serve as **mentors** to underrepresented students (16 years of age or older) who are rising 11th and 12th graders with MSE interest and potential.

The apprenticeships serve to strengthen the Nation's and the Government's efforts to recruit and sustain underrepresented students in science and engineering fields.



APPRENTICESHIP EXPERIENCE

SHARP PLUS apprentices reside on the campuses of participating universities under the supervision of a SHARP PLUS Faculty Coordinator and staff at each institution.

During the apprenticeship, students have the opportunity to:

- Conduct meaningful research as part of a team
- Interact with mentors and potential role models in a professional work environment
- Interact with students from different racial/ethnic and geographic backgrounds
- Experience living away from home in a college environment
- Participate in a variety of enrichment activities that include:
 - ✓ Opportunities to enhance oral and written communications, computer, and leadership skills
 - ✓ Multicultural experiences
 - ✓ A visit to the nearest NASA Field Center

Apprentices also prepare written final reports on their experiences that are submitted to NASA.

During the summer and the academic year, participants are provided information and guidance on: MSE careers and college admission requirements; college preparatory mathematics and science courses; mathematics- and science-oriented summer and academic year enrichment opportunities; and potential financial resources for college.

Apprentices also are expected to participate in an academic year community service activity, related to mathematics or science, upon their return to school in the fall.

ELIGIBILITY CRITERIA

Student applicants are identified in a variety of ways, including self-identification. For consideration in this program, *an applicant must be a U.S. citizen or national and must meet **each** of the following criteria:*

- Be at least 16 years of age, be enrolled in high school, and have completed at least the 10th grade by the start of the Program
- Be returning to high school in the fall as a junior or senior
- Have completed at least one semester of algebra, one semester of geometry, and at least 1 year of biology, chemistry, or physics with a grade of B or better in each course
- Speak and write English at a level that does not require significant assistance
- If chosen as a finalist, be willing to participate in a formal interview as part of the evaluation process and to submit a completed "condition of health" questionnaire
- Be committed to full participation throughout the 8 weeks of the Program
- Have a significant/demonstrated interest in pursuing a science-or engineering-related career

To maximize the number of students reached through SHARP PLUS, beginning with the 1998 Program, rising seniors who have previously participated in the SHARP PLUS Program will only be eligible to compete for a limited number of leadership/apprenticeship slots (one per site). Eligible students will need to complete a special application form available through the QEM Network.

FINANCIAL BENEFITS

- Round-trip transportation between home and the host institution
- Housing and meals (**TAXABLE**)
- Salary of \$4.75 per hour for a 40-hour work week (**TAXABLE**)